

### Recent Fern Literature.

Craw, Joe E. Hydrogen-ion Reaction of Native Indiana Fern Soils. Butler University Botanical Studies 2: 151-158. 1932.

Several articles on the soil-reactions of ferns native to the northeastern states have already appeared, but supplementary data are always welcome. Notable features of Mr. Craw's studies are (1) the large number of samples examined, amounting to over 90 in some cases; and (2) the determination of the hydrogen-ion activity electrometrically in the laboratory, both of which favor the obtaining of especially accurate data as to the preferences of the plants. The results are tabulated so as to bring out the reaction-ranges and optima for thirty-four species and varieties; in a few cases, since only Gray Manual names are used, the exact variety represented is uncertain.

The results in general agree so closely with those of previous writers that the soil-reaction preferences of the plants concerned can be regarded as now known with a considerable degree of finality. There are in fact but two cases of apparently discordant results. In *Asplenium platyneuron* the reviewer had previously decided the optimum reaction to be mediacid, whereas the new results indicate it to be but minimacid. The difference here is simply a matter of geography, as high acidity characterizes the especially luxuriant colonies of this fern on the southern Coastal Plain, but in the northeastern states the relations are the same as in Indiana. In the case of *Asplenium pinnatifidum*, however, the situation is not so clear. Previous tests at eastern localities to the number of 50 or more have clearly pointed to mediacid soil preference, whereas Craw found three samples from Pinnacle Rock near Shoals, Martin County, Indiana, to be neutral in reaction. It is to be

hoped that this fern can be studied from the soil-reaction standpoint at other of its western outliers, to see whether neutrality is characteristic of its habitats under the climatic conditions of the interior states.—EDGAR T. WHERRY.

The Fern Society Library has just received the first three numbers of the *Acta Phytotaxonomica et Geobotanica*, published under the auspices of The Phytogeographical Society, Botanical Institute, Kyoto Imperial University, Japan. Included in the first two numbers are three articles on ferns, printed partly in English and partly in Japanese. In the latter articles, the names are given in their Latin form.

*Oishi, Jisaburo.* "On the fossil Dipteridaceae." The fern family Dipteridaceae has been found of special interest in matters of comparative morphology. Modern types found in the Oriental tropics have been carefully studied by Dr. F. O. Bower and others. The present paper contains illustrations of leaf division patterns as well as lists of some 40 species included in six genera of this family. Note is made of the paper because of its technical interest.

*Tagawa, M.* By this author there are contributed two articles under the general title of "Spicilegium Pteridographiae Asiae Orientalis, (I & II)." In these it is interesting to note the occurrence of a number of our own genera, including also occasionally identical species.

*Tatewaki, M., & Kimoto, U.* "Florula of the island of Kaibato (Todomoshiri)." These writers list a considerable number of pteridophytes. The following types are of special interest to American readers: *Botrychium Lunaria*; *Ophioglossum vulgatum*; *Adiantum pedatum*; *Athyrium acrostichoides* and *A. Filix-femina*; *Cystopteris fragilis*; *Dryopteris dilatata*, *fragrans*, *Linnaeana*,